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File: Sunstrand

JOHN ASHCROFT  
Governor



G. TRACY MEHAN III  
Director

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STATE OF MISSOURI

Division of Energy  
Division of Environmental Quality  
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DEPARTMENT OF NATURAL RESOURCES

DATA CENTER  
MISSOURI DEPARTMENT OF  
NATURAL RESOURCES

MEMORANDUM

March 18, 1992

To: Mimi Garstang

From: Jim Vandike *JV*

Subject: Hydrologic investigation of the Sunstrand (Modine) site area, Camden County, MO, Sec. 26, T. 38 N., R. 17 W.

The Sunstrand (Modine) site occupies a ridge-top setting in the northwestern part of Camdenton, Missouri. Surface elevation at the site is about 960 feet above sea level. Surface-water drainage from the site is to the south and southwest into an unnamed tributary of the Niangua Arm of Lake of the Ozarks. The receiving stream forks in the NE 1/4 Sec. 26, T. 38 N., R. 17 W. The northeast fork drains the area north of the Sunstrand (Modine) site and southwest of Missouri Highways 5 and 7. The Sunstrand (Modine) facility drains into the southeast fork. Straight line distance from the site to the confluence of the receiving stream with the Lake of the Ozarks is about 1.6 miles (see enclosed map).

On January 31, 1992, Edith Starbuck and I walked the receiving stream from approximately the east line of Sec. 26, T. 38 N., R. 17 W., to the county road crossing just upstream from the lake in the SE 1/4 Sec. 27, T. 38 N., R. 17 W. We also examined the northeast branch of the receiving stream from its confluence with the southeast branch to the SE 1/4 Sec. 23, T. 38 N., R. 17 W.

The receiving stream was found to have intermittent flow from upstream of the Sunstrand (Modine) facility to about 1,800 feet downstream of the confluence of the northeast and southeast forks. Flow varied somewhat depending on location, but was estimated to be 2 to 5 gallons per minute. Flow, estimated to be 2 to 5 gallons per minute, resumed about 4,000 feet downstream of the losing point, or about 900 feet upstream of the county road. There was essentially no flow in the northeast fork throughout its reach. The upper part of the watershed is developed in Gasconade Dolomite. The Gunter Sandstone crops out in the lower portion of the watershed. Stream-bed material is mostly coarse gravel and cobbles with some sand.

An attempt was made to conduct a dye trace from the losing reach of the receiving stream downstream of the Sunstrand (Modine) facility on February 13, 1992. The entire drainage was reexamined on foot, and there was found to be flow completely through the previously dry section downstream of the facility. Additionally, there was flow throughout the northeast branch to at least an



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RCRA Records Center



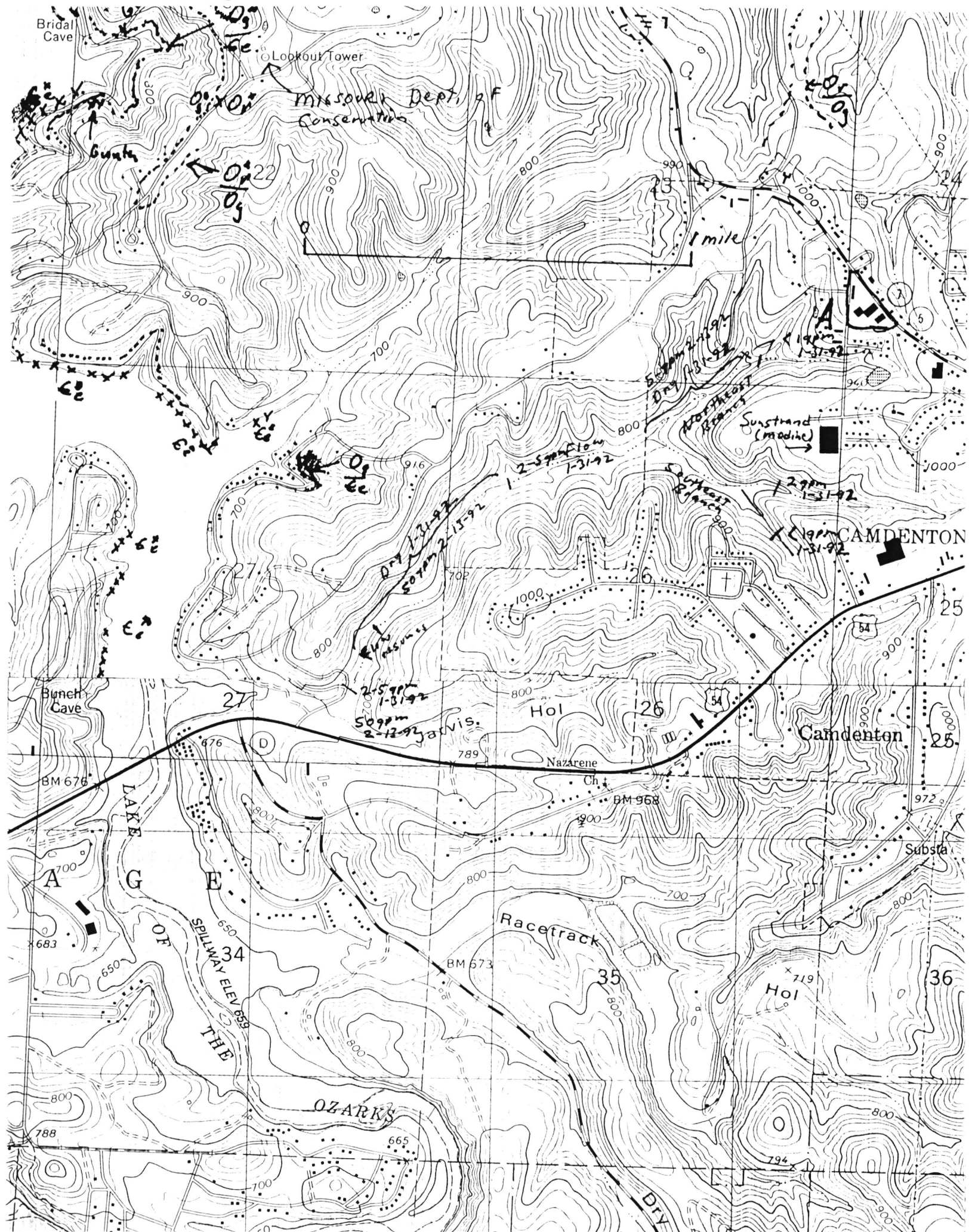
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(Garstang, P. 2)

elevation of 900 feet. No flow measurements were made, but flow in the receiving stream was estimated at about 50 gallons per minute, and appeared to maintain or gain flow downstream. Flow in the northeast branch increased from about 1 gallon per minute at elevation 900, to about 5 gallons per minute where the northeast and southeast branches merge. Water in both branches appeared clear, and did not contain any visible suspended sediment. Soil was moist, but there was no signs of recent heavy precipitation or runoff.

When the receiving stream was examined on January 31, 1992, there had been no appreciable precipitation (enough to generate appreciable surface-water runoff) for several weeks. On February 13, 1992, we visited the Missouri Department of Conservation office about 2 miles northwest of the Sunstrand (Modine) facility, where they maintain a weather observation station. Total precipitation the week previous to the February visit was less than 0.7 inches.

Based on observations made during these two visits, it appears that flow lost into the subsurface along the receiving stream during very dry weather likely stays within the valley. Very little rainfall was necessary to raise the water table elevation in the valley and generate surface flow throughout the reach of the stream. Any dye trace from the Sunstrand (Modine) facility should be initiated from drill holes or a backhoe trench. Dye would likely be recovered in either the valley west of the facility, or in adjacent watersheds to the north and northeast of the facility. These valleys were also examined on February 13, 1992, and found to be gaining throughout their reaches on that day.





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES PROGRAM

Site Sampling Report

Sundstrand Site

Camdenton, MO

July 20 through July 31, 1992

RECEIVED

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HAZARDOUS WASTE PROGRAM  
MISSOURI DEPARTMENT OF  
NATURAL RESOURCES

INTRODUCTION

As part of a site inspection authorized by the Federal Comprehensive Environmental Response, Compensation, and Liability Act, sampling was conducted at the Sundstrand Site in Camdenton, Missouri. The sampling was requested by the Missouri Department of Natural Resources (MDNR), Hazardous Waste Program (HWP), to determine whether hazardous substance releases from the Sundstrand Tubular Products facility (presently Modine Heat Transfer) has caused groundwater contamination in the area. Previous sampling conducted by Modine contractors indicated that soils around the site have been contaminated with trichloroethylene (TCE), 1,1,1 trichloroethane (TCA), tetrachloroethylene (PCE) and vinyl chloride.

Sampling during this inspection included soil and groundwater produced from the construction of monitoring wells on Modine Heat Transfer property, neighboring private wells, surface water from a creek downgradient from the site, and a spring. David Mosby of the MDNR, Environmental Services Program (ESP), collected samples and provided contractor oversight. Edith Starbuck of the MDNR, Division of Geology and Land Survey, was present throughout the inspection to provide technical support during well drilling. Floyd Chilcutt and Bert Williams operated the drill rig for Layne-Western Company, subcontractors for the site. Don Mans of Modine Manufacturing Company split some of the samples collected during the inspection. The sampling data will be used in scoring the site according to the U.S. EPA's hazard ranking system.

METHODS

Two monitoring wells (MW#1 and MW#2) were drilled and sampled during the site inspection. An air-rotary drill rig was used for well construction. Monitoring well #1 (MW#1) was drilled south of the facility parking lot at a location considered downgradient of the contaminated area. Monitoring well #2 (MW#2) was drilled near the northeast side of the facility at a location considered to be upgradient of the contamination. (See Appendix A for sampling locations.)

During drilling, soil was collected at five-foot intervals with a split spoon sampler and placed in containers with stainless steel spoons. Surface samples at both drilling locations were collected as direct grabs with stainless steel spoons because samples at this depth could not be collected with the split spoon sampler. Soil samples and drilling activities were monitored for organic vapors using a flame ionization detector (FID) or a photoionization detector (PID).



Drilling of wells ceased when sufficient water was encountered in the desired monitoring zone. After drilling was completed, wells were cased, screened, and grouted by Layne-Western and developed by MDNR and Layne-Western personnel. Wells were developed with a Grundfos submersible pump and/or stainless steel or Teflon bailer. Wells were purged until water turbidity decreased or until field parameters of conductivity, pH, and temperature, measured after each well volume, stabilized within 10% of the prior reading. Three volumes were purged from both wells during development.

Wells were sampled no earlier than the following day after development. Prior to sampling, one to three additional well volumes were purged depending on field parameter stability. Samples were collected by lowering a stainless steel or Teflon bailer to the bottom of the water column, pulling the bailer back up through the well, and filling sample containers directly.

Groundwater was sampled from three private wells located downgradient from the site at the E.M. Gillemberg, Robert E. Bailey, and Steve Fera residences. Samples were collected from an outside tap after running water out of the lines for three to five minutes.

Two grab samples were collected of surface water downgradient of the site by submersing the appropriate containers into the water body. A small creek, which flows through Jarvis Hollow (just below MW#1) and Ha Ha Tonka Spring, which flows into the Lake of the Ozarks approximately 2<sup>1</sup>/<sub>4</sub> miles south of the site, were sampled.

An equipment blank was collected of the rinsate from the decontamination of the pump and hose used to develop and purge the wells. This sample was collected after sampling MW#1 and before sampling MW#2. Tap water from the facility was used as the rinse water.

The following samples were collected at the above mentioned locations:

<u>SAMPLE #</u>	<u>LOCATION</u>	<u>SAMPLE TYPE</u>	<u>DATE</u>
92-6915	MW#1 10-12 feet deep	soil boring	7/20/92
92-6916	MW#1 15-17 feet deep	soil boring	7/20/92
92-6917	MW#1 20-20.5 feet deep	soil boring	7/20/92
92-6918	creek below site in Jarvis Hollow	surface water	7/22/92
92-6919	Ha Ha Tonka Spring at state park	surface water	7/22/92
92-6920	E.M. Gillemberg residence	groundwater	7/28/92
92-6921	Robert E. Bailey residence	groundwater	7/28/92
92-6922	Steve Fera residence	groundwater	7/28/92
92-6923	MW#2 0-3 inches deep	soil grab	7/28/92
92-6924	MW#2 5-5.5 feet deep	soil boring	7/28/92
92-6925	MW#2 10-12 feet deep	soil boring	7/28/92
92-6926	MW#2 15-16 feet deep	soil boring	7/28/92
92-6927	MW#2 20-22 feet deep	soil boring	7/28/92
92-6928	MW#1	groundwater	7/30/92
92-6930	Sundstrand Site	rinsate blank	7/30/92
92-6931	MW#2	groundwater	7/31/92
92-6932	MW#1 0-3 inches deep	soil grab	7/31/92

All samples were analyzed for volatile organics at the state's environmental laboratory within the Environmental Services Program in Jefferson City. Each sample was given a numbered tag and the corresponding number was recorded on a chain-of-custody form. Other laboratory procedures were followed according to the requirements and standard operating procedures of the Preliminary Assessment/Site Inspection Quality Assurance Project Plan for Fiscal Year 1992.

#### OBSERVATIONS

Voids at the bedrock/soil interface or in the competent rock itself impeded drilling progress and well construction at MW#1. An outer casing of steel had to be set 80 feet deep and grouted around the outside in order to advance this well to the desired depth.

Total well depth of MW#1 was 161 feet and MW#2 was 197 feet. Static water levels were 144 feet and 174.5 feet for MW#1 and MW#2, respectively.

Water in the monitoring wells changed from turbid and reddish-brown, to silty and grey, and finally to colorless and clear during development and purging. Since well samples were collected from the bottom of the water column, they were grey and silty, even though water from the top of the water column was colorless and clear.

No organic vapors were detected in the soil borings or drilling air returns from any of the wells.

Soil samples were predominantly composed of red clay. Amounts of chert, limestone, topsoil, sandstone, and stringers of tan-colored clay varied with depth and location. Soil from the boring of MW#2 contained more tan clay and sand than MW#1.

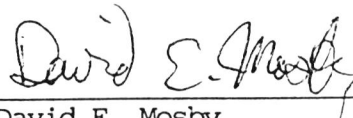
Don Mans reported in a phone conversation to Dave Mosby that the sample they split of MW#2 contained low levels of TCE below the detection level used by the MDNR laboratory. Modine did not split the water sample of MW#1.

#### RESULTS

See Appendix B for sample results.

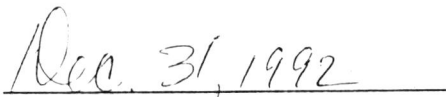
Sampling Report  
Sundstrand Site  
Camdenton, MO  
Page Four

Submitted by:



David E. Mosby  
Environmental Specialist  
Superfund Unit  
Environmental Services Program

Date:



Approved by:



James H. Long  
Director  
Environmental Services Program

JHL:dmd

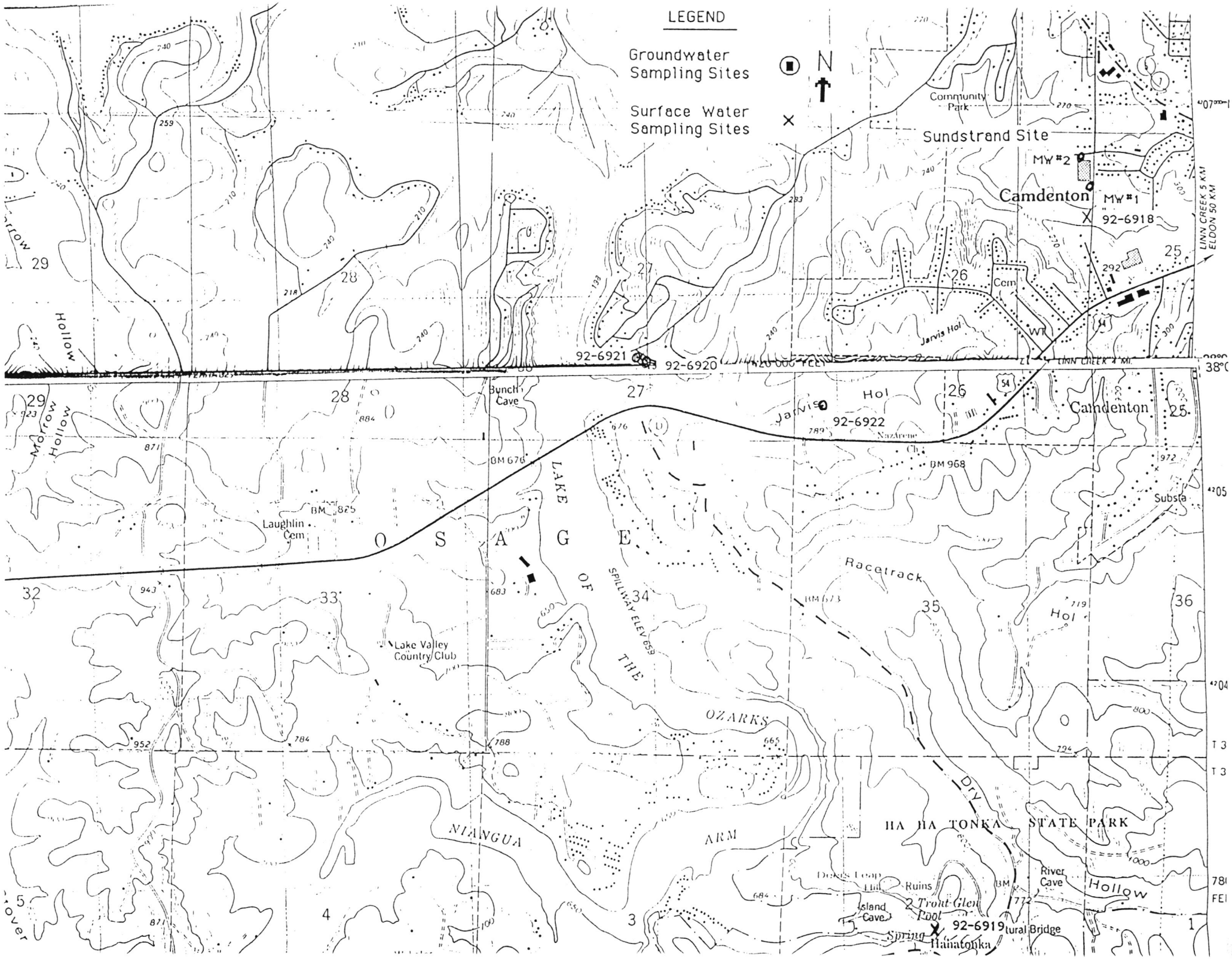
c: Julie Bloss, Environmental Specialist, PA/SI Unit, Superfund  
Section, Hazardous Waste Program ✓



APPENDIX A

SAMPLING REPORT  
SUNDSTRAND SITE  
CAMDENTON, MO

Site Map



LEGEND

Groundwater  
Sampling Sites

Surface Water  
Sampling Sites



Community  
Park

Sundstrand Site

MW#2

Camdenton

MW#1

92-6918

Cem

Jarvis Hol

WT

92-6921

92-6920

92-6922

92-6919

92-6918

92-6917

92-6916

92-6915

92-6914

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APPENDIX B

SAMPLING REPORT  
SUNDSTRAND SITE  
CAMDENION, MO

Sampling Data  
July 20 through July 31, 1992



ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6915

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND (MODINE MANUFACTURING CO.) SITE  
CAMDENTON, MO., GRAB OF BOREHOLE CORE  
OF SOIL AT 10-12 FT., MW# 1

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/20/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 25 ug/Kg
1,1,2,2-Tetrachloroethane	< 25 ug/Kg
1,1,2-Trichloroethane	< 25 ug/Kg
1,1-Dichloroethane	< 25 ug/Kg
1,1-Dichloroethylene	< 25 ug/Kg
1,2-Dichloroethane	< 25 ug/Kg
1,2-Dichloroethene (Total)	< 25 ug/Kg
1,2-Dichloropropane	< 25 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 100 ug/Kg
4-Methyl-2-Pentanone	< 100 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 25 ug/Kg
Bromodichloromethane	< 25 ug/Kg
Bromoform	< 25 ug/Kg
Bromomethane	< 25 ug/Kg
Carbon Disulfide	< 25 ug/Kg
Carbon Tetrachloride	< 25 ug/Kg
Chlorobenzene	< 25 ug/Kg
Chloroethane	< 25 ug/Kg

Page 2  
Sample no. 92-6915  
Date 12/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 25 ug/Kg
Chloromethane	< 25 ug/Kg
cis-1,3-Dichloropropene	< 25 ug/Kg
Dibromochloromethane	< 25 ug/Kg
Ethylbenzene	< 25 ug/Kg
Methylene Chloride	< 25 ug/Kg
Styrene	< 25 ug/Kg
Tetrachloroethene	< 25 ug/Kg
Toluene	< 25 ug/Kg
trans-1,3-Dichloropropene	< 25 ug/Kg
Trichloroethene	< 25 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 25 ug/Kg
Xylenes (Total)	< 25 ug/Kg
COMMENTS: Analyzed by GC/MS at the Missouri DNR laboratory.	

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6916

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF BOREHOLE CORE  
OF SOIL AT 15-17 FT., MW# 1

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/20/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 25 ug/Kg
1,1,2,2-Tetrachloroethane	< 25 ug/Kg
1,1,2-Trichloroethane	< 25 ug/Kg
1,1-Dichloroethane	< 25 ug/Kg
1,1-Dichloroethylene	< 25 ug/Kg
1,2-Dichloroethane	< 25 ug/Kg
1,2-Dichloroethene (Total)	< 25 ug/Kg
1,2-Dichloropropane	< 25 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 100 ug/Kg
4-Methyl-2-Pentanone	< 100 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 25 ug/Kg
Bromodichloromethane	< 25 ug/Kg
Bromoform	< 25 ug/Kg
Bromomethane	< 25 ug/Kg
Carbon Disulfide	< 25 ug/Kg
Carbon Tetrachloride	< 25 ug/Kg
Chlorobenzene	< 25 ug/Kg
Chloroethane	< 25 ug/Kg



Page 2  
Sample no. 92-6916  
Date 12/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 25 ug/Kg
Chloromethane	< 25 ug/Kg
cis-1,3-Dichloropropene	< 25 ug/Kg
Dibromochloromethane	< 25 ug/Kg
Ethylbenzene	< 25 ug/Kg
Methylene Chloride	< 25 ug/Kg
Styrene	< 25 ug/Kg
Tetrachloroethene	< 25 ug/Kg
Toluene	< 25 ug/Kg
trans-1,3-Dichloropropene	< 25 ug/Kg
Trichloroethene	< 25 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 25 ug/Kg
Xylenes (Total)	< 25 ug/Kg

COMMENTS: Analyzed by GC/MS at the Missouri DNR laboratory.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6917

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF BOREHOLE CORE  
OF SOIL AT 20-20.5 FT., MW# 1

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/20/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 25 ug/Kg
1,1,2,2-Tetrachloroethane	< 25 ug/Kg
1,1,2-Trichloroethane	< 25 ug/Kg
1,1-Dichloroethane	< 25 ug/Kg
1,1-Dichloroethylene	< 25 ug/Kg
1,2-Dichloroethane	< 25 ug/Kg
1,2-Dichloroethene (Total)	< 25 ug/Kg
1,2-Dichloropropane	< 25 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 100 ug/Kg
4-Methyl-2-Pentanone	< 100 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 25 ug/Kg
Bromodichloromethane	< 25 ug/Kg
Bromoform	< 25 ug/Kg
Bromomethane	< 25 ug/Kg
Carbon Disulfide	< 25 ug/Kg
Carbon Tetrachloride	< 25 ug/Kg
Chlorobenzene	< 25 ug/Kg
Chloroethane	< 25 ug/Kg

Page 2  
Sample no. 92-6917  
Date 12/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 25 ug/Kg
Chloromethane	< 25 ug/Kg
cis-1,3-Dichloropropene	< 25 ug/Kg
Dibromochloromethane	< 25 ug/Kg
Ethylbenzene	< 25 ug/Kg
Methylene Chloride	< 25 ug/Kg
Styrene	< 25 ug/Kg
Tetrachloroethene	< 25 ug/Kg
Toluene	< 25 ug/Kg
trans-1,3-Dichloropropene	< 25 ug/Kg
Trichloroethene	< 25 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 25 ug/Kg
Xylenes (Total)	< 25 ug/Kg

COMMENTS: Analyzed by GC/MS at the Missouri DNR laboratory.



ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6918

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3000

Sample Description:

SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF CREEK DOWN HILL FROM FACILITY

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/22/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 100 ug/L
4-Methyl-2-Pentanone	< 100 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L
Chloroform	< 5.0 ug/L

Page 2  
Sample no. 92-6918  
Date 12/30/92

PARAMETERS

RESULTS

Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at the Missouri DNR  
Environmental Services Program laboratory.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6919

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF HA HA TONKA SPRING  
HA HA TONKA STATE PARK

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/22/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 100 ug/L
4-Methyl-2-Pentanone	< 100 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L

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Sample no. 92-6919  
Date 12/30/92

PARAMETERS

RESULTS

Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at the Missouri DNR  
Environmental Services Program laboratory.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6920

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.  
GRAB OF WELL FROM E.M. GILLENBERG HOUSEHOLD

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L



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Sample no. 92-6920  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6921

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.  
GRAB OF WELL FROM ROBERT E. BAILEY HOUSEHOLD

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L

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Sample no. 92-6921  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L
COMMENTS: Analyzed by GC/MS at Continental Analytical Services, Inc.	

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6922

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.  
GRAB OF WELL FROM STEVE FERRA HOUSEHOLD

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L

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Sample no. 92-6922  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L
COMMENTS: Analyzed by GC/MS at Continental Analytical Services, Inc.	

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6923

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.  
GRAB OF SOIL FROM MW #2 FROM 0-3 INCHES DEEP

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg

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Sample no. 92-6923  
Date 9/02/92

PARAMETERS

RESULTS

Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	< 5.0 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6924

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.  
GRAB OF SOIL FROM MW #2 FROM 5 - 5.5 FT. DEEP

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg



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Sample no. 92-6924  
Date 9/02/92

PARAMETERS

RESULTS

Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	6.8 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6925

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:

SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.

GRAB OF SOIL FROM BORING FOR MW #2 FROM 10 - 12 FT. DEEP

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg

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Sample no. 92-6925  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	< 5.0 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6926

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 12/30/92  
Project Code: 3658/3148

Sample Description:

SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.

GRAB OF SOIL FROM BORING FOR MW #2 FROM 15 - 16 FT. DEEP

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6927

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3148

Sample Description:

SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO.

GRAB OF SOIL FROM BORING FOR MW #2 FROM 20 - 22 FT. DEEP

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/28/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg

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Sample no. 92-6926  
Date 12/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	37 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

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Sample no. 92-6927  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	7.1 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6928

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF MW #1

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
TEMPERATURE COMMENTS : ANALYZED IN FIELD	16.9 DEGREES C
pH COMMENTS : ANALYZED IN FIELD	9.8
SPECIFIC CONDUCTANCE COMMENTS : ANALYZED IN FIELD	219 umhos/cm
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L



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Sample no. 92-6928  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L
Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6930

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., RINSATE BLANK OF PUMP AND HOSE

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/30/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L
Chloroform	< 5.0 ug/L

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Sample no. 92-6930  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L
COMMENTS: Analyzed by GC/MS at Continental Analytical Services, Inc.	

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6931

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO., GRAB OF MW #2

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/31/92

<u>PARAMETERS</u>	<u>RESULTS</u>
TEMPERATURE COMMENTS : ANALYZED IN FIELD	16.0 DEGREES C
pH COMMENTS : ANALYZED IN FIELD	7.5
SPECIFIC CONDUCTANCE COMMENTS : ANALYZED IN FIELD	831 umhos/cm
1,1,1-Trichloroethane	< 5.0 ug/L
1,1,2,2-Tetrachloroethane	< 5.0 ug/L
1,1,2-Trichloroethane	< 5.0 ug/L
1,1-Dichloroethane	< 5.0 ug/L
1,1-Dichloroethylene	< 5.0 ug/L
1,2-Dichloroethane	< 5.0 ug/L
1,2-Dichloroethene (Total)	< 5.0 ug/L
1,2-Dichloropropane	< 5.0 ug/L
2-Butanone	< 100 ug/L
2-Hexanone	< 50 ug/L
4-Methyl-2-Pentanone	< 50 ug/L
Acetone	< 100 ug/L

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Sample no. 92-6931

Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Benzene	< 5.0 ug/L
Bromodichloromethane	< 5.0 ug/L
Bromoform	< 5.0 ug/L
Bromomethane	< 5.0 ug/L
Carbon Disulfide	< 5.0 ug/L
Carbon Tetrachloride	< 5.0 ug/L
Chlorobenzene	< 5.0 ug/L
Chloroethane	< 5.0 ug/L
Chloroform	< 5.0 ug/L
Chloromethane	< 5.0 ug/L
cis-1,3-Dichloropropene	< 5.0 ug/L
Dibromochloromethane	< 5.0 ug/L
Ethylbenzene	< 5.0 ug/L
Methylene Chloride	< 5.0 ug/L
Styrene	< 5.0 ug/L
Tetrachloroethene	< 5.0 ug/L
Toluene	< 5.0 ug/L
trans-1,3-Dichloropropene	< 5.0 ug/L
Trichloroethene	< 5.0 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride/Chloroethene	< 5.0 ug/L
Xylenes (Total)	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

ENVIRONMENTAL SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 92-6932

Reported to: DAVID MOSBY  
Affiliation: SPFD

Date: 9/02/92  
Project Code: 3658/3000

Sample Description:  
SUNDSTRAND SITE (MODINE HEAT TRANSFER)  
CAMDENTON, MO, GRAB OF SOIL  
NEAR BOREHOLE MW #1 FROM 0-3 INCHES

Collected by: DAVID MOSBY  
Affiliation: SPFD

Date: 07/31/92

<u>PARAMETERS</u>	<u>RESULTS</u>
1,1,1-Trichloroethane	< 5.0 ug/Kg
1,1,2,2-Tetrachloroethane	< 5.0 ug/Kg
1,1,2-Trichloroethane	< 5.0 ug/Kg
1,1-Dichloroethane	< 5.0 ug/Kg
1,1-Dichloroethylene	< 5.0 ug/Kg
1,2-Dichloroethane	< 5.0 ug/Kg
1,2-Dichloroethene (Total)	< 5.0 ug/Kg
1,2-Dichloropropane	< 5.0 ug/Kg
2-Butanone	< 100 ug/Kg
2-Hexanone	< 50 ug/Kg
4-Methyl-2-Pentanone	< 50 ug/Kg
Acetone	< 100 ug/Kg
Benzene	< 5.0 ug/Kg
Bromodichloromethane	< 5.0 ug/Kg
Bromoform	< 5.0 ug/Kg
Bromomethane	< 5.0 ug/Kg
Carbon Disulfide	< 5.0 ug/Kg
Carbon Tetrachloride	< 5.0 ug/Kg
Chlorobenzene	< 5.0 ug/Kg
Chloroethane	< 5.0 ug/Kg

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Sample no. 92-6932  
Date 9/02/92

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroform	< 5.0 ug/Kg
Chloromethane	< 5.0 ug/Kg
cis-1,3-Dichloropropene	< 5.0 ug/Kg
Dibromochloromethane	< 5.0 ug/Kg
Ethylbenzene	< 5.0 ug/Kg
Methylene Chloride	< 5.0 ug/Kg
Styrene	< 5.0 ug/Kg
Tetrachloroethene	< 5.0 ug/Kg
Toluene	< 5.0 ug/Kg
trans-1,3-Dichloropropene	< 5.0 ug/Kg
Trichloroethene	< 5.0 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride/Chloroethene	< 5.0 ug/Kg
Xylenes (Total)	< 5.0 ug/Kg
COMMENTS: Analyzed by GC/MS at Continental Analytical Services, Inc.	